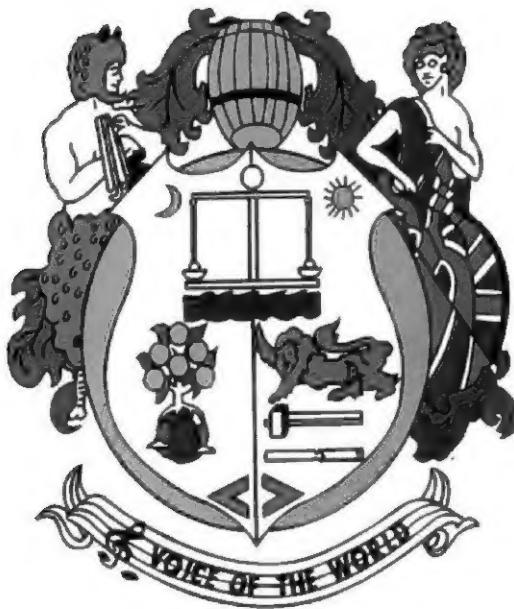


ORANGE™



Thunderverb Owners Manual

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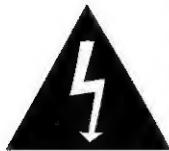
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Before Operating Read These Important Safety Instructions



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated 'dangerous voltage' within the product's enclosure that may

be of sufficient magnitude to constitute a risk of electric shock to persons. Terminals labeled as "Speaker Outputs" must be connected to a speaker cabinet of the designated load rating using an un-shielded two conductor cable for speaker use at all times during operation.



The exclamation point within an equilateral triangle and "WARNING" are intended to alert the user to the presence of important operating instructions. Failure to heed the instructions will result in severe injury or death.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades, one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- **Servicing: Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards.**

- Refer all servicing to qualified service personnel.
- **Damage Requiring Service:** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions: (a) When the power-supply cord or plug is damaged; (b) If liquid has been spilled, or objects have fallen into the product; (c) If the product has been exposed to rain or water; (d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation; (e) If the product has been dropped or damaged in any way; (f) When the product exhibits a distinct change in performance - this indicates a need for service.
- **Replacement Parts:** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.



Thunderverb 50 & 200 Owners Manual

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Thank you for choosing Orange. You are now a member of the 'Legendary British Guitar Amplifier' owners club!

Since 1968, when the company was founded, Orange has been a pioneering force in the guitar amplification industry. Today, with a team of the world's finest amplifier engineers, Orange continues to push back the boundaries of conventional tube amplifier design.

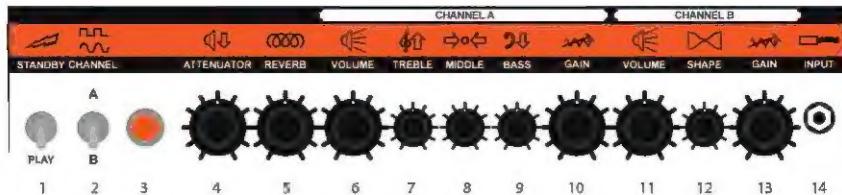
Our commitment to craftsmanship and quality control has allowed our amplifiers to stand the test of time, giving their owners as much pleasure now, as the day they were bought. To maintain this level of excellence, each Orange amplifier is put through many rigorous test procedures before leaving the factory.

The warmth, tonal quality and rich harmonics generated by a valve amplifier cannot be reproduced by 'artificial' means. Many guitarists have reached the same conclusion: neither the transistor nor microchip is a suitable alternative to valve technology.

This booklet contains valuable technical and safety information. Please take the time to read this manual as the information may enhance the sound and performance of your amplifier.

We are confident that you will be delighted with your new purchase and that it will provide you with many years of enjoyment.

Front Panel

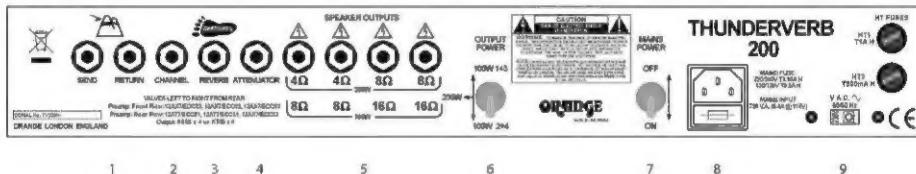


1. Standby Switch
2. Channel Switch
3. Power Indicator Lamp
4. Attenuator Control
5. Reverb Control
6. Volume Control
7. Treble Control
8. Middle Control
9. Bass Control
10. Volume Control
11. Shape Control
12. Gain Control
13. Input

Please refer to the 'Using Your Amplifier' section for correct standby/on procedure.
Switches amplifier between Clean and Dirty Channels

Controls the amount of attenuation for both channels
Controls the Reverb level for both channels
Controls the channel A output level
Controls the high frequency level of the channel A
Controls the mid range level of the channel A
Controls the bass frequency level of the channel A
Controls the channel B output level
Controls the sweep of frequency of channel B
Controls the Overdrive/Distortion level of the channel B
Input for your instrument

Rear Panel



1. Send & Return Sockets
2. Channel Footswitch Socket
3. Reverb Footswitch Socket
4. Attenuator Footswitch Socket
5. Speaker Outputs
6. Output Selector switch
7. Mains Power Switch
8. Mains Socket & Fuse Holder
9. Mains Voltage Switch

Effects loop for most outboard units.
Attaching an optional footswitch to this socket will allow you to remotely change channels.
Attaching an optional footswitch to this socket will allow you to remotely switch the reverb effect on and off.
Attaching an optional footswitch to this socket will allow you to remotely switch the Attenuator on and off.
Always ensure that a speaker cabinet or combination of speaker cabinets of the correct impedance is connected to your amplifier before powering up, appropriate combinations are as follows:
B & 16 Ohm - 100 Watt Setting
1 x 16 Ohm cabinet connected to the 16 Ohm output
1 x 8 Ohm cabinet connected to one of the 8 Ohm outputs
2 x 16 Ohm cabinets each connected to one of the 8 Ohm outputs
4 & 8 Ohm - 200 Watt Setting
1 x 8 Ohm cabinet connected to the 8 Ohm output
1 x 4 Ohm cabinet connected to one of the 4 Ohm outputs
2 x 8 Ohm cabinets each connected to one of the 4 Ohm outputs
(Thunderverb 200 only) with this set at 200 watts, all of the valves are working and the amp is running on an 8 ohm load. When the switch is set to one of the 100 watt selections the amp is running a 16 ohm load.
WARNING: In the event of an output valve failure we recommend that you seek the advice of a qualified service technician.
This switch is used to turn the power on to the amplifier.
This is where your mains lead plugs in. Also the mains fuse is located here. Please refer to the Technical Specification section for fuse ratings.
Switches amp between 220V and 240V or 100V and 120V. This should be set to the mains electricity voltage used in the country where the amplifier is to be operated.

Please ensure your amplifier is switched to the correct voltage for your country. If unsure please consult your dealer.

Using Your Amplifier

IMPORTANT! Before connecting your amplifier to a power source, please check the following:

1. Ensure your speaker cabinet is connected to the correct impedance speaker output socket, (see Rear Panel, item 2), using a good quality speaker cable. **Do not use guitar leads.**
2. Ensure that the voltage selector switch is set to the correct mains voltage, (see Rear Panel, item 5).

When powering up your amplifier, switch to the 'Standby' position first and leave for two minutes before switching to the on position. (This will maximise the life of your valves).

If you are unsure about any of the above points please consult your local Orange supplier.

Using The Thunderverb

IMPORTANT! Before connecting your amplifier to a power source, please

check the following:

1. Ensure your speaker cabinet is connected to the correct impedance speaker output socket, (see Rear Panel, item 2), switched to the correct power and impedance settings (TV200 only). Always use a good quality speaker cable, do not use guitar leads. Combo models will have it's speaker attached).

2. Ensure that the voltage selector switch is set to the correct mains voltage, (see Rear Panel, item 5).

When powering up your amplifier, switch to the ensure the 'Standby' position is set from the front panel and then switch the power on from the rear panel, two minutes before switching from 'Standby' to the 'On' position. (This will maximise the life of your valves).

If you are unsure about any of the above points please consult your local Orange supplier.

Using The Channel A

This channel features a classic Orange control section of Gain, Treble, Bass, Middle and Master Volume.

A three stage gain section is utilised here, turning the gain control clockwise will gradually increase the saturation level from clean through blues/crunch up to full rock sounds."

Using Channel B

This channel features three controls, Gain, Shape and Master Volume. Gain level are similar to Channel A, however using the unique 'Shape' control will allow a vast array of tones, from Classic Rock through to Scooped Metal.

Attenuator Control

This control allows the user to set the levels as high as desired and then reduce the output level from the amplifier, the option is also foot-switchable creating a very flexible dual level available on each channel.

Technical Specifications

	Thunderverb 50	Thunderverb 200
Power	50 Watts RMS 8/16 ohms	200 Watts RMS into 4/8 ohms / 100 Watts RMS into 8/16 ohms
Channel Configuration	Channel A / Channel B	Channel A / Channel B
Channel A Controls	Gain / Bass / Middle / Treble / Volume	Gain / Bass / Middle / Treble / Volume
Channel B Controls	Gain / Shape / Volume	Gain / Shape / Volume
Shared Controls	Attenuator / Reverb	Attenuator / Reverb
Footswitch Function	Channels / Attenuator / Reverb	Channels / Attenuator / Reverb
FX Loop	Valve Driven	Valve Driven
Reverb	Valve Driven Acoustronics Spring Reverb	Valve Driven Acoustronics Spring Reverb
Power Valves	2 x EL34	4 x 6550
Preamp Valve	4 x ECC83 / 12AX7	4 x ECC83 / 12AX7
Reverb Valves	2 x ECC81 / 12AT7	2 x ECC81 / 12AT7

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WARNING

VALVES AND FUSES CAN FAIL AT ANY TIME!

From time to time output and preamp valves may fail. Most users find regular valve replacement to be of benefit to the general upkeep and reliability of their amplifier. We suggest that you always have spare valves available as replacements in the event of a valve failure. Every Orange Class AB Amplifier will require re-biasing when its output valves are replaced. This may not be necessary if use the same brand of valves with a similar manufacturers rating. If unsure you should have the bias checked. BIASING SHOULD ALWAYS BE CARRIED OUT BY AN EXPERIENCED TECHNICIAN. Your amplifier uses various fuses to protect your amplifier from inconsistent voltages. It is highly recommended that you keep a supply of spare fuses in case of failure. For more information on caring for your amplifier, visit the Orange website - www.orangeamps.com Tubes, fuses, covers and other accessories for your Orange amplifier are available from our online store - www.orangeamps.com/shop

FREE EXTENDED WARRANTY OFFER

This Orange product is protected for one year against defects in material and workmanship. This warranty applies to the entire product, except the speakers, which are protected for three months. To extend your warranty to two years, free of charge, simply visit our website and register your purchase.

REGISTER RIGHT NOW AT

<http://ORANGEAMPS.COM/WARRANTIES.ASP>